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TITLE: Post-traumatic Headache and Psychological Health:

Mindfulness Training for Mild Traumatic Brain Injury

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comprehensive rehabilitative effort for this group of MTBI patients.

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project addresses multiple FY09 TBI/PH topic areas by validating an evidence-based, mind-body approach for prevention and treatment of post-TBI headache, stress, and associated psychological health issues in order to restore function, enhance well being, prevent post-TBI headache chronification, develop psychological resilience, and promote long-standing health benefits. The focus of this project is on evaluation of mindfulness based stress reduction as one, potentially critical component of a

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#### Introduction

Traumatic brain injury has been coined the signature injury of OIF/OEF, with posttraumatic headache being a cardinal symptom found to be as high as 36% of soldiers with MTBI. Combat-related headaches are undertreated, associated with high sick calls, missed days, negative psychological/mood states, and impair overall quality of life. Comorbid anxiety, depression, PTSD and other psychological, psychosocial, and health stressors portend poorer TBI/headache outcomes, supporting the need for integrative health care. Development, evaluation, and integration of a specialized posttraumatic headache treatment program into a comprehensive TBI rehabilitation effort is critical to restoration of function, health, and quality of life of our soldiers. This project addresses multiple FY09 TBI/PH topic areas by validating an evidence-based, mind-body approach for prevention and treatment of post-TBI headache, stress, and associated psychological health issues in order to restore function, enhance well being, prevent post-TBI headache chronification, develop psychological resilience, and promote long-standing health benefits. The focus of this project is on evaluation of mindfulness based stress reduction as one, potentially critical component of a comprehensive rehabilitative effort for this group of MTBI patients.

## **Body**

This project marks the collaboration between the University of North Carolina at Chapel Hill (UNC), Womack Army Medical Center (WAMC), and the Carolina Headache Institute (CHI). During these last 12 months, we accomplished the majority of the goals proposed in the Statement of Work. Specifically, we contacted 241 potential subjects. We screened 132 and enrolled 79 subjects. We have randomized 9 cohorts, finishing cohorts 1 through 5 and are in the follow-up phase of cohort 6, 7 & 8. We renewed both UNC and WAMC IRBs.

# **Key Research Accomplishments**

- We are achieving enrollment projections and have successfully launched 9 of 12 cohorts.
- We were awarded a no-cost extension until September 2015 and have maintained IRB/Continuing review approvals

## **Reportable Outcomes**

- 1. Subject Recruitment (Goal: 120 subjects)
  - 241 Contacted
  - 132 Screened
  - 79 Enrolled

\*Cohort 1: 5 enrolled

\*Cohort 2: 8 enrolled

\*Cohort 3: 12 enrolled

\*Cohort 4: 6 enrolled

\*Cohort 5: 10 enrolled

\*Cohort 6: 10 enrolled

\*Cohort 7: 7 enrolled

\*Cohort 8: 7 enrolled

\*Cohort 9: 7 enrolled

\*Cohort 10: 3 enrolled

# 2. Accomplishments

- Cohorts #1- #4 completed
- Cohort #5 pending hit 6 info
- Cohort #6 pending follow-ups
- Cohort #7 pending follow-ups
- Cohort #8 pending 2 week follow-ups
- Initiated intervention for Cohort #9 December 1, 2014
- Recruiting for Cohort #10
- No cost extension approved Nov 13, 2014
- Continuing Review approved on July 14, 2014.

#### Conclusion

We have accomplished the majority of the tasks outlined in the SOW. We are on track to complete all interventions, finalize database, complete statistical analyses, and prepare manuscripts by September 2015.

## References

Not applicable

# **Appendices**

Not applicable